REMARKS

INTRODUCTION

In accordance with the foregoing, no new matter is being presented, and approval and entry are respectfully requested.

Claims 10, 12-20, and 22 have been allowed. Claims 1-30 are pending and under consideration. Reconsideration is respectfully requested.

REJECTION OF CLAIMS 1, 11, 25, and 26 UNDER 35 U.S.C. § 102(e) AS BEING ANTICIPATED BY MATSUOKA (U.S. PATENT NO. 6,272,261)

In the Office Action, at page 2, claims 1, 11, 25, and 26 were rejected under 35 U.S.C. §102(e) as being anticipated by Matsuoka (U.S. Patent 6,272,261). This rejection is traversed and reconsideration is requested. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Independent claim 1 of the Applicant's claimed invention recites: "...an image signal divider dividing an image signal into a plurality of subblocks as original image data; and a generating unit generating parameters which determine cubic convolution interpolation coefficients in units of subblocks, and performing cubic convolution interpolation on the original image data." Thus, the generating unit generates parameters that determine cubic convolution interpolation coefficients in units of subblocks needed for performing cubic convolution interpolation on the original image data.

Matsuoka does not teach or suggest generating parameters which determine cubic convolution interpolations coefficients in units of subblocks in order to perform cubic convolution interpolation on the original data. Instead, Matsuoka discloses dividing conversion coefficients corresponding to each partial image into three domains from low frequency to high frequency, and into three wedge-shaped domains each radiating from the upper left-hand corner of the matrix, and calculating a mean value of the sum of the coefficients of each domain. Matsuoka, column 5, lines 35-67. Data of the calculated mean values are then inputted into a hierarchical neural network to select a filter best suited to perform interpolation processing of the partial image data. Matsuoka, column 6, lines 8-20. The selected conversion filter, i.e., cubic

convolution interpolation, then performs interpolation processing. Matsuoka, column 3, lines 50-65. Thus, in Matsuoka, the coefficient values calculated in the coefficient matrix are inputted into the hierarchical neural network in order to select the filter. Matsuoka, column 3, lines 50-65. Matsuoka does not teach or suggest generating parameters from the coefficient matrix to determine the cubic convolution interpolation coefficients needed to perform cubic convolution interpolation.

Therefore, for at least this reason, claim 1 is distinguishable over the cited prior art.

Independent claim 11 of the Applicant's claimed invention is a method claim reciting: "... generating parameters which determine cubic convolution interpolation coefficients in units of subblocks, and performing cubic convolution interpolation on the plurality of subblocks." As discussed above, Matsuoka does not teach or suggest generating parameters to determine cubic convolution interpolation coefficients in units of subblocks. Therefore, for at least the reasons that claim 1 is distinguished over the cited prior art, it is respectfully submitted that claim 11 distinguishes over the cited prior art.

Independent claim 25 of the Applicant's claimed invention is an apparatus claim reciting: "... a parameter optimizer optimizing a parameter which determines interpolation coefficients according to a local property of the image signal ..." As discussed above, Matsuoka does not teach or suggest using a parameter optimizer to optimize a parameter to determine interpolation coefficients. Therefore, for at least the reasons that claim 1 is distinguished over the cited prior art, it is respectfully submitted that claim 25 distinguishes over the cited prior art.

Independent claim 26 of the Applicant's claimed invention is a method claim reciting: "... optimizing a parameter which determines interpolation coefficients according to a local property of the image signal; and performing a cubic convolution interpolation on the image signal using the optimized parameter." As discussed above, Matsuoka does not teach or suggest optimizing a parameter to determine interpolation coefficients and performing a cubic convolution interpolation on the image signal using the optimized parameter. Therefore, for at least the reasons that claim 1 is distinguished over the cited prior art, it is respectfully submitted that claim 26 distinguishes over the cited prior art.

Each of claims 2-9, 21, 23, and 24 of the Applicant's claimed invention depend from claim 1. Therefore, for at least the reasons that claim 1 is distinguished over the cited prior art,

it is respectfully submitted that each of claims 2-9, 21, 23, and 24 distinguishes over the cited prior art.

Each of claims 27-30 of the Applicant's claimed invention depend from claim 11. Therefore, for at least the reasons that claim 11 is distinguished over the cited prior art, it is respectfully submitted that each of claims 27-30 distinguishes over the cited prior art.

CONCLUSION

In accordance with the foregoing, claims 1-30 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: ____April 29, 2004____   By: _____

Michael D. Stein
Registration No. 37,240

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501